FoxBASE+/Mac™

Demonstration Package

Fox Software

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FoxBASE+/Mac Demo

Welcome to FoxBASE+/Mac — not only the fastest, but also *the best* database management program available today for the Macintosh.

Introduction

FoxBASE+/Mac sets a new standard for high performance database management on the Macintosh. FoxBASE+/Mac is the *only* Macintosh database system which combines a state-of-the-art graphical user interface — no programming required — with unparalleled speed and a mature, full-featured underlying database engine and procedural language.

FoxBASE+/Mac is perfect for database beginners, sophisticated power-users, demanding developers, and everyone in-between.

FoxBASE+/Mac has it all!

Demo Materials

This demo package contains the following items:

- A pre-installed demo version of FoxBASE+/Mac — fully-functional with one exception: databases are limited to 120 records.
- A collection of sample programs you can run and data you can work with. The programs illustrate several of the innovative features of FoxBASE+/Mac and can be executed by choosing **Do** from the **Program** menu.
- The demo reference material, including a short guided tour of some of the many features of FoxBASE+/Mac.
- Information on ordering a full-capacity version of FoxBASE+/Mac.

NOTE TO DEMO USERS: Knowing that seeing is believing, we encourage you to copy the demo contents and pass them on — share with others the power, speed and utility that make FoxBASE+/Mac the database management program of choice for all Macintosh users.

Multi-Window, Multi-Font, Multi-Color

Multiple window support is an integral part of FoxBASE+/Mac. Up to 9 user output screens can be active simultaneously plus multiple program editing, help, trace, debugging, status, and memo and picture field editing windows.

Wide Variety of Screen I/O Tools

FoxBASE+/Mac provides a remarkably rich variety of tools for use in user-defined input forms. These include:

- Radio buttons.
- Check boxes.
- Pop-up menus.
- Text buttons.
- Text editing regions and scrollable lists.
- Menu Bar with pull-down menus.

Picture Data Type

FoxBASE+/Mac databases also support a picture data type. Pictures stored in databases may be either monochrome or full color. When diplayed, they may be clipped or scaled to a rectangular frame of any size — even used as buttons in input forms.

Context-Sensitive Help Facility

FoxBASE+/Mac provides an extremely general, sophisticated Help facility designed to provide an on-line reference manual for all users, which developers can easily adapt to provide their application systems with a refined, context-sensitive Help facility.

Sample Programs

If you're interested in how a FoxBASE+/Mac program looks and operates, **Do** a program from the **Program** menu. Or, if you'd like to see the commands contained in a program, **Open** a program file from the **File** menu or type "MODIFY COMMAND <filename>" into the **Command** window to invoke the FoxBASE+/Mac program editor.

1 – Requirements and Installation

What You Need to Run FoxBASE+/Mac

The system requirements needed to run FoxBASE+/Mac are

Computer	System	Finder
Macintosh Plus, SE series, II series	System 4.2 or greater	Finder 6.0

The minimum memory and hardware requirements are:

- One megabyte of RAM
- One hard disk drive and one 800k floppy disk drive
- At least 2.5 megabytes of free hard disk space for installation

All the files on the demo disk (with the exception of FoxInstall) have been reduced in size through state-of-the-art file compression techniques. This file compression allows us to provide even more information and data for you on a disk. However, the files contained on this disk are unusable unless they have been properly de-compressed with FoxInstall. Before you try to use this demo program, follow the steps listed below to install the demo.

1. Create a new folder on your hard disk and name it **FOX**.
2. Open the demo disk and drag *all* the contents to the **FOX** folder.
3. Open the new **FOX** folder.
4. To de-compress the files, double-click on the FoxInstall icon: 
5. Start FoxBASE+/Mac by double-clicking the FoxBASE icon: 
6. *Voilá!* You're running FoxBASE+/Mac.

You're now ready for the short guided tour that will demonstrate some of the many features of FoxBASE+/Mac.

13 – For Application Developers

In addition to the easy-to-use interactive menu system, screen painter and report generator, FoxBASE+/Mac includes a powerful, fourth generation programming language together with a complete set of programming and debugging tools, including a new template language compiler and application generator. With these components combined in one package, program development and debugging have never been so easy.

Debug

In the **Debug** window you can monitor the value of variables and expressions and set break points for programs. Enter the variables or expressions you wish to monitor in the left window. As your program executes, their values are displayed on the right.

To set a program break point, click in the column that separates the left and right windows. A bullet appears indicating that the break point is set. When the value of the variable or expression changes, the executing program is suspended. To remove a break point, click on the bullet.

Trace

In the **Trace** window, the program currently being executed can be viewed as it runs. The program line being executed is highlighted and shown in context with the surrounding statements.

Break points can also be set in the **Trace** window by Command-clicking on the line where a break point is desired. A bullet appears to the left and the program is suspended when the break point line is reached.

Vast Program Library

FoxBASE+/Mac provides complete compatibility with the industry-standard dBASE programming language, as do all Fox products. And because FoxBASE+/Mac is completely compatible, there are literally *hundreds of thousands* of programs available which will run without changing a single line of code — immediately, perfectly, no excuses.

2 – General Notes

The short guided tour that follows is designed to get you started by using the **View** window and some of the more powerful dialogs in FoxBASE+/Mac. This tour also explains a few of FoxBASE+/Mac's many attractive features.

Typographic Conventions

Whenever we refer to one of the pull-down menus, or to a command contained in a menu, we will always highlight the word by using **this typeface**. Also, any time we refer to a button or other dialog item that contains text, we will highlight the word(s) with **the same typeface**. We hope this helps to eliminate confusion and allows you to better relate what's on screen to the information contained in this section.

Operating FoxBASE+/Mac

You can operate FoxBASE+/Mac through the **View** window, with the pull-down menus, by entering commands in the **Command** window, by running program/procedure files, or with a combination of any of these.

On-Line Help

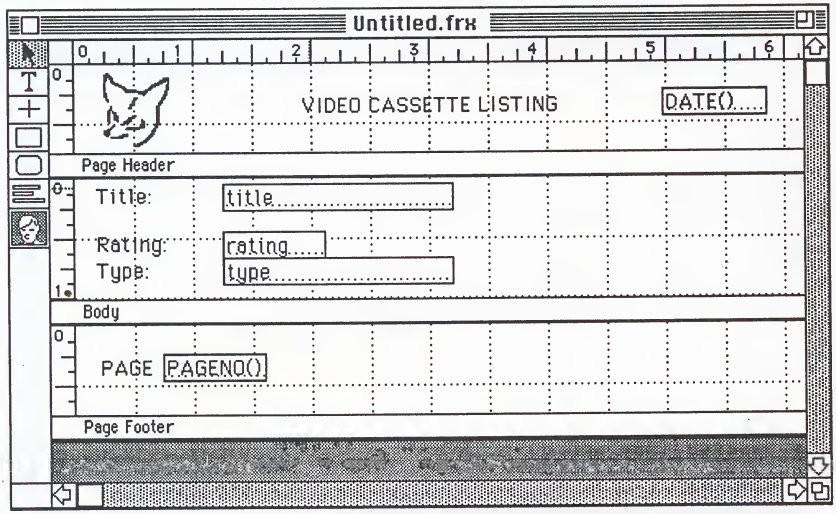
Have a question? Not sure how something works? **Help** is always available, right at your fingertips. Our extensive on-line **Help** feature can be accessed at any time.

To call the **Help** feature:

- Select **Help** from the Apple menu,
- Select **Help** in the **Window** menu,
- Type HELP in the **Command** window or
- Press the command key combination Command-H.

There's also **Help** available for the pull-down menu commands. Just press Command-?. Then move the question mark cursor to a pull-down menu and select the menu item you have a question about.

Now you'll place the page number in the Page Footer. Use the pusher to reduce the size of the Body. The Page Footer should now be visible. If it's not, scroll down until it is. Using the text tool type "PAGE" in the left side of the Page Footer. Click on the Fields tool, and draw a small box just to the right of the text you just typed. The **Report Expression** dialog comes forward. Type PAGENO() on the **Expression** line, and click **OK**. Now let's take a look at the results of our design.



Page Preview

Page Preview offers you a quick and easy way to make sure your report will look the way you want it to before you print it. Choose the **Page Preview** option from the **Report** menu. The first page of your report will be displayed. You may move through pages of the report by clicking on the **Next**, **Prev** or **Page** buttons. Moving the pointer over the displayed page turns the pointer into a small magnifying glass. You may enlarge or zoom in on a small area of the page by moving the magnifying glass to the area you would like to examine and then clicking. Click on the **Zoom Out** button to return to a larger view.

Try it yourself

Now that you are familiar with the **Page Preview** feature of FoxReport, try some of the other options available. From the **Report** menu select the **Page Layout** option and change the number of columns. See how your report looks now with **Page Preview**. Use some of the other tools available in the layout window to add lines and boxes to your report. Change font sytles and sizes. Feel free to experiment! You can save your report form by selecting the **Save** or **Save As...** options from the **File** menu and retrieve it later to make changes or print new reports.

3 – Using the Menus

Whenever you're working with FoxBASE+/Mac, you can tell it how to do things through the pull-down menus that are located in the menu bar.

Menu Bar

At the top of the FoxBASE+/Mac screen you'll see the Menu Bar.

Menu Bar

The Menu Bar contains the pull-down menus (**Apple**, **File**, **Edit**, **Database**, **Record**, **Program**, **Text** and **Window**). These menus contain the FoxBASE+/Mac interactive commands.

Pull-Down Menus

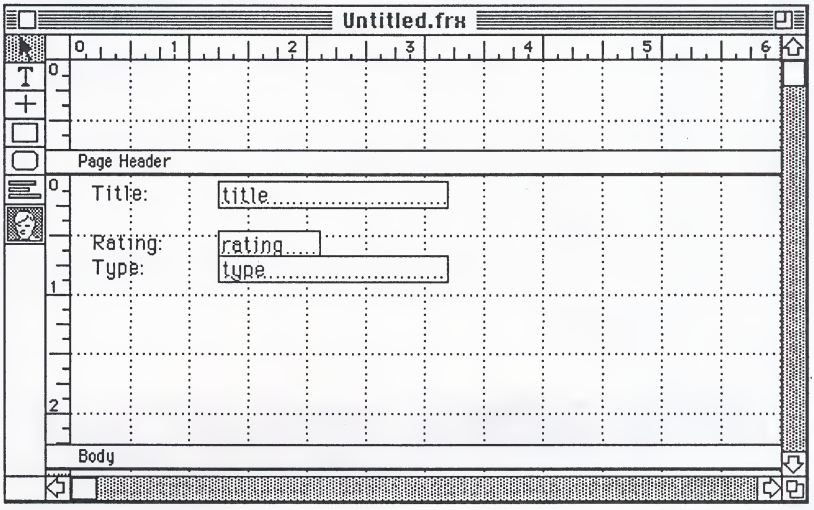
The pull-down menus are opened by clicking on the menu title and dragging the pointer through the list. You select a menu command by releasing the mouse button when the command you want to execute is highlighted.

Some menu commands require additional information before they can be carried out. These commands are followed by an ellipsis (three dots or periods in a row, as in **Open...**). When you select a command which has an ellipsis, a dialog box will come forward in which you provide the necessary information.

You can choose any command from any menu as long as the command is not dimmed. Commands that are dimmed are not available within the current mode of operation. If a menu title on the menu bar is dimmed, then none of the commands in that menu are available.

Some menu commands have a command key "shortcut." If a shortcut is available, it's shown to the right of its equivalent command in the menu.

band. Two field layouts are available. Click on the box on the right to select it, and then click **OK**. Notice that the field names are placed to the left of the fields themselves. Let's remove some of the fields and field names from our report. We'll remove all but three: **title**, **rating**, and **type**. Shift–click (hold down the shift key while you click) on the remaining nine fields and field names, and then press the Delete (or Backspace) key, or choose the **Clear** option from the **Edit** menu. Your layout window should look like the one that follows.



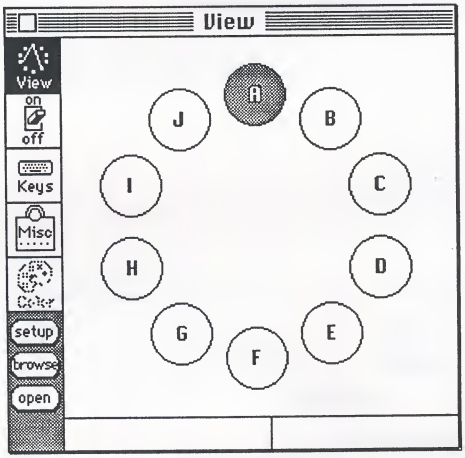
Now let's put a page heading that consists of the report title, today's date and a picture logo into our report. To place the title, click on the text tool (the "T" box, the second tool down on the left side of the window). Type the title of the report, "VIDEO CASSETTE LISTING," in the center of the Page Header band.

To the right of the report title you can now insert today's date. Click on the Fields tool, the sixth tool down on the left side of the window. The pointer changes to a small cross. To the right of the newly created report title, click the mouse and hold the mouse button down. Pull the mouse down about 1/4 inch, and then pull the mouse to the right about 1 inch to create a small rectangle. Release the mouse button. A **Report Expression** dialog appears. Type DATE() on the **Expression** line and click **OK**.

To the left of the report title we'll place a picture logo. Click on the Graphics tool, the seventh tool down on the left side of the window. Again, the pointer is replaced by a small cross. Create a 1 inch square by clicking and dragging the mouse. When you release the mouse button the **Choose a Picture** dialog comes forward. Make sure that the fox head is displayed. If it's not, scroll through the available pictures until it is displayed. Click **OK**.

4 – Opening a Database

The **View** window is one of the most useful FoxBASE+/Mac tools. It provides an easy way to open database files, to establish relations or to set or change many FoxBASE+/Mac options. Whenever you're working interactively, think of **View** as the master control panel for all operations.



View Window

You activate the **View** window by selecting **View** from the **Window** menu, by typing SET or SET VIEW ON into the **Command** window or by executing SET VIEW ON from a FoxBASE+/Mac program file.

Work Areas

FoxBASE+/Mac has 10 work areas in which you can open a database (and other files like indexes). These work areas are displayed in the **View** window as circles lettered A through J. The currently selected work area is the one that's shaded — area A in the **View** shown earlier.

With ten work areas available, you can have as many as ten databases open at the same time (one per work area). If you open a database in a work area that already has a database open in it, the file(s) in that work area are closed before the new database and its associated files are opened. When you're using more than one database, be sure you've selected the correct area before you open additional databases.

12 – FoxReport - The Report Generator

With FoxReport, the FoxBASE+/Mac report designer, you can produce custom reports in many different formats — from short summaries to detailed listings. You can also produce mailing labels. FoxReport provides the power and flexibility to quickly create great looking reports without writing a single programming command.

FoxReport operates in a fashion that's similar to other Macintosh draw and paint programs. You place text, fields, lines and boxes, as well as other design elements, in a layout window. The page preview feature lets you check your design before you send the report to the printer.

Starting FoxReport

FoxReport is similar in operation to FoxForm. Many of the tools available to you in FoxReport are the same ones you've seen and used in FoxForm. If you haven't read the previous section, you may want to do so now.

Creating a Report

With the **Video.dbf** file open, let's start a new report form. Choose **New** from the **File** menu, click the **Report** radio button (if it's not already selected) and click **OK**.

A new, untitled FoxReport layout window is displayed. Notice that the layout window is separated into 3 bands — Page Header, Body and Page Footer. Objects placed in the Page Header will appear at the top of every page. You could place your company logo, the report title and today's date in the Page Header. The Body contains information from the database file itself, usually individual records or groupings of records. The Page Footer usually contains the page number and summary information like subtotals and totals. We'll place objects in each of these three bands. Let's make room for all the fields in the Body band of our layout window. Place the pointer over the ruler on the left–hand side of the layout window. The pointer will change to the pusher (a small hand). Pull the Body band down three or four inches to the bottom of the layout window so that it is just above the lower scroll bar.

Quick Report

Now select the **Quick Report** option from the **Report** menu. The **Quick Report** option will place all the fields from **Video.dbf** into the Body

You'll notice that the **View** window has three buttons in the lower right edge of the window: **setup**, **browse**, and **open**.

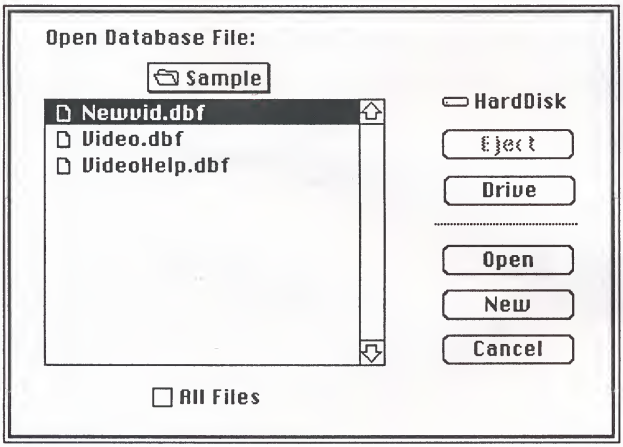
setup - brings forward a **setup** dialog that allows you to set up your work area, complete with indexes, forms, filters, etc.

browse - brings forward a **browse** window for the currently selected database, in which you can view, edit and append data.

open - brings forward a directory dialog that allows you to open a database in the selected work area.

Open a Database

Since the first thing you probably want to do is open a database, let's open one now in work area A. With work area A selected, click on the **open** button or just double-click on the work area circle. This brings a directory dialog forward.



Directory dialog

You can also open a database by selecting a work area and clicking **setup** or by selecting **Open** from the **File** menu.

This directory dialog displays all the **.dbf** database files in the current working folder. We want to open **Video.dbf**, which is in the **sample** folder. So, first you'll need to open the **sample** folder. You then open the **Video.dbf** database file by selecting it and clicking **Open** or by double-clicking on the file's name.

Try It Yourself

Using the built-in format file generator, the compiled template **Simple Application.cod**, or some other template file, you can create a FoxBASE+/Mac program file or format file that will use your screen.

To generate a format file with the screen form, choose **Generate** from the **Program** menu. A dialog will come forward in which you must enter some information. First, click the **Format File** radio button. The **Template...** button is dimmed. This happens because the template for generating format files is built-in. Also, if the screen form is still open, its name is listed in the **Form...** text box automatically; otherwise, you will need to click on **Form...** and select a form file. Click **OK**. You will be asked to name the format file (format files are given an .fmt extension by default). With that done, the format file is generated.

Once generated, you can use the file by bringing forward the setup dialog, checking **Format...** (in the setup dialog) and selecting the newly created format file. With this format set, when you change or append records the specified format will be used instead of the default screen.

Once a database is open in a work area, the corresponding circle will display one of two different icons. The icon that's displayed will depend on whether or not index files are in use.

This icon tells you that only a database file is open in the work area. No index files are open for that database.

This icon is used when the database in the work area has at least one index file open.

The name of the open database (or its alias) is displayed near the work area circle.

When a work area with an open database is selected, one more button appears in the lower left-hand edge of the **View** window:

close - closes the database and all associated files in the selected work area.

All Files Option

You can also display **All Files** that are in the current folder, if the one you wish to open is not displayed. Just click on the All Files check box at the bottom of the directory dialog.

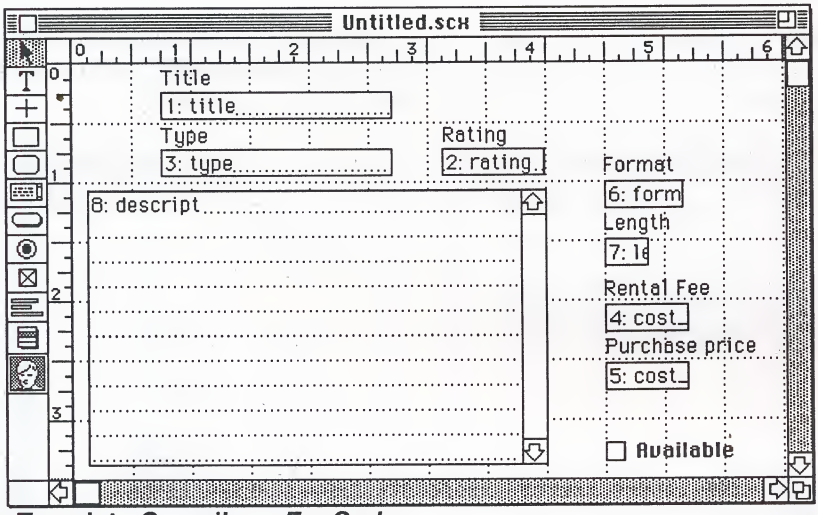
☐ **All Files**

NOTE: Since many FoxBASE+/Mac operations are file-type specific, the directory dialogs will often display only files of a particular type. Clicking the **All Files** check box, however, allows you to examine and choose from *all* files in the selected directory. In this way, if a file you wish to work with does not have the proper file type, it can still be opened and manipulated — provided it contains valid data appropriate to that type of file. This **All Files** conversion is typically needed when files are first imported from other products or other operating environments (like MS-DOS).

Once you have the field labels added, you have a completed form. At this point you can save the form using the **Save** or **Save As...** commands from the **File** menu

FoxForm Screen Table File

The output from FoxForm is a screen table file with an extension of .SCX. This file contains a complete description of the screen and object attributes, data entry clauses, label names, SAY/GET definitions, data entry order and other characteristics that you designed into your form. FoxForm screen tables are stored on disk as delimited text files — each line of a screen table contains information that pertains to a particular file or field defined in the FoxForm screen.



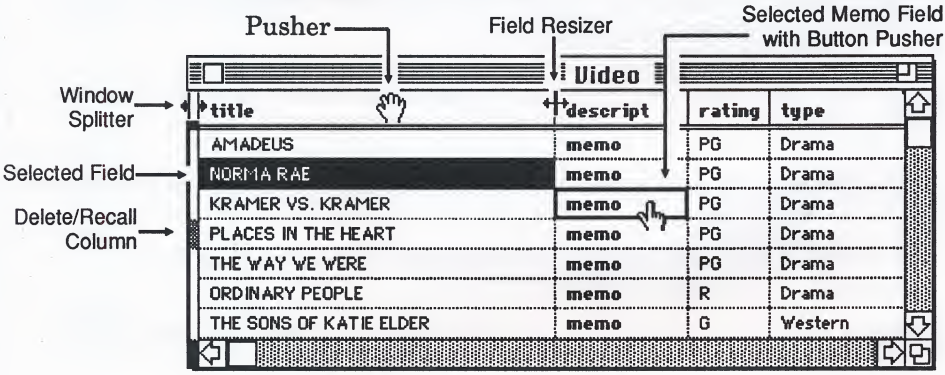
The Template Compiler – FoxCode

A FoxForm screen table file alone is not very useful. In fact, the screen table itself is of no use without first converting it to a usable form. The FoxCode template compiler allows you to create applications that you can use to convert the screen table file to a FoxBASE+/Mac format (.FMT) file or use data from the table file to create a complete custom application.

The Program Generator – FoxGen

The program generator produces FoxBASE+/Mac program code using information from compiled templates and FoxForm screen tables.

5 – Browsing a Database



Browse Window

Let's take a look at the data stored in **Video** by clicking **browse**. When a **browse** window is open, the name of the database is listed in the title bar. The field names are listed in the cells just below the title bar (title, **descript**, **rating**, etc.), and the data contained in the fields is displayed in the columns beneath the field names. The **browse** window has several special features that let you display your data just the way you want. The special pointers available only in a **browse** window are:

Window-splitter

This pointer lets you split the **browse** window into two panes, or close the window back into one pane. To split the window into two panes, move the pointer to the top (or bottom) of the delete/recall column. Drag the splitter to the right to make the left-hand pane larger; drag it to the left to make the left-hand pane smaller (or to close it altogether).

Field-resizer

This pointer lets you resize (for display purposes only) the selected fields in your **browse** window. By placing the field-resizer on the right edge of a field name and dragging, you enlarge or decrease the display size of the selected field. This resizing does not change the actual width of the fields in the database, but only the displayed width.

Pusher

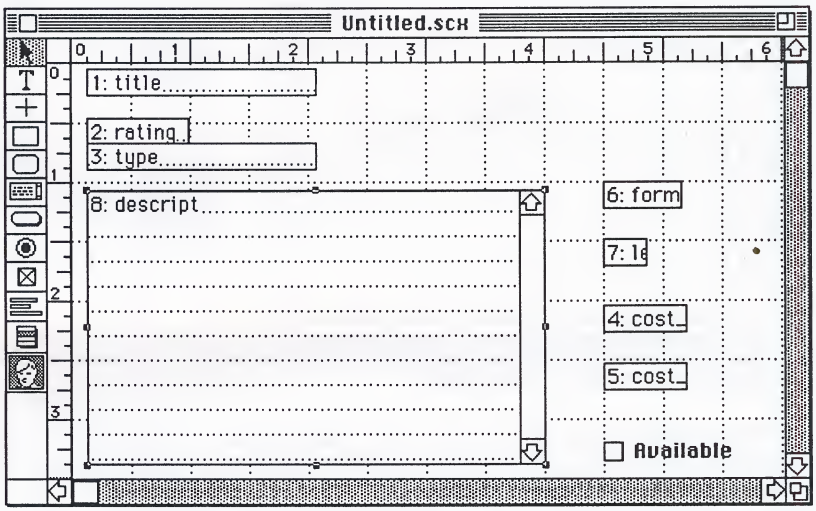
This pointer lets you "shuffle" the order in which your database fields are displayed. To reposition a field, place the pusher in the cell that contains the field's name and push it where you want it. The fields will then be displayed in the new order. This shuffling does not change the actual order of the fields in the database, only the order that they are displayed on the screen.

In the **Check Box Name** text box, type Available. Then click **Choose...** and select the database field **available** from the list. Then click **OK** in the chooser dialog and click **OK** again in the check box dialog. Your form window returns.

Before you create a scrollable text region for the memo field, **descript**, you'll need to move the fields **cost_rent** (4), **cost_buy** (5), **format** (6) and **length** (7) above the **Available** check box.

To do this, you use the selection pointer, it's the arrow at the top of the list. Click on the **cost_rent** field. It will be selected. Then shift-click on **cost_buy**. With both fields selected, place the pointer inside either one and drag them to the right. Then move **format** and **length** in a similar fashion, and separate both pairs.

Now click on the Text Region tool, it's the sixth tool down on the left side of the window. Position and drag the pointer until you've created a scrollable text region in the lower left portion of the form.



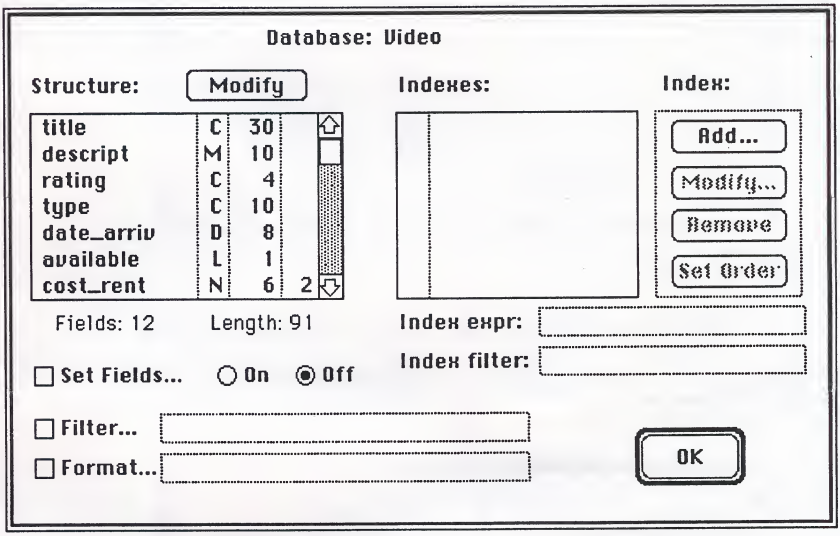
Then **Choose...** the database field **descript**. The form window returns, looking something like the window above.

Now, you'll want to finish designing the form by moving the fields around on the screen until your form looks similar to one displayed below without the text.

Then, using the text tool, add field labels.

6 – Creating an Index

Now, let's create an index file for **Video** and set some special options in the work area. You can do this with the **setup** dialog box, which you bring forward by clicking the **setup** button in the **View** window.



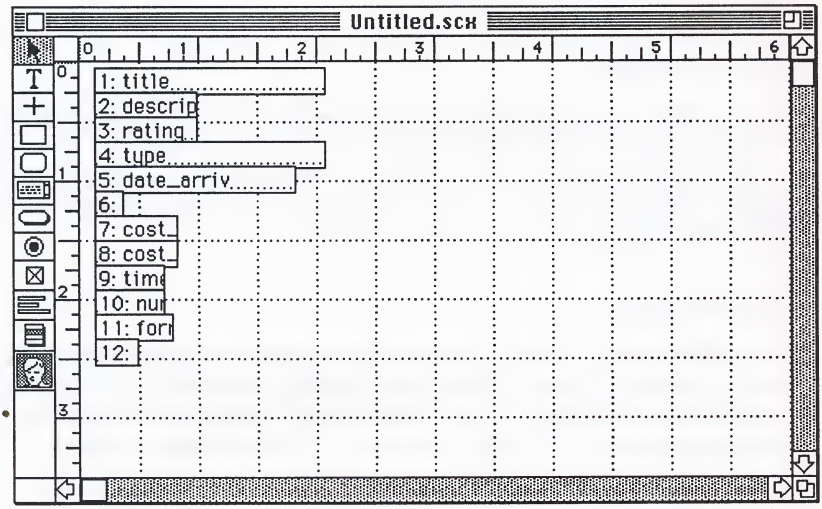
Setup dialog

Setup Dialog

With the **setup** dialog you can establish which index file(s) you want to use with a database, select a list of fields for display and **browse** purposes, define a filter, or even specify which format file to use for data input and editing. Up to 7 index files can be specified for use with the database. However, only one of these index files controls the order of the database at any one time.

To create a new index file, click the **Add...** button in the **Index:** area of the **setup** dialog. A directory dialog will come forward.

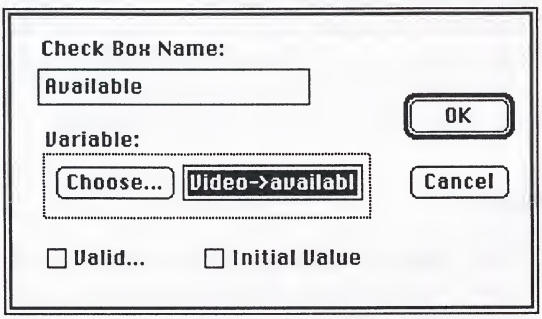
num_sold. All three field objects should now be selected (they'll have handles on their perimeters).

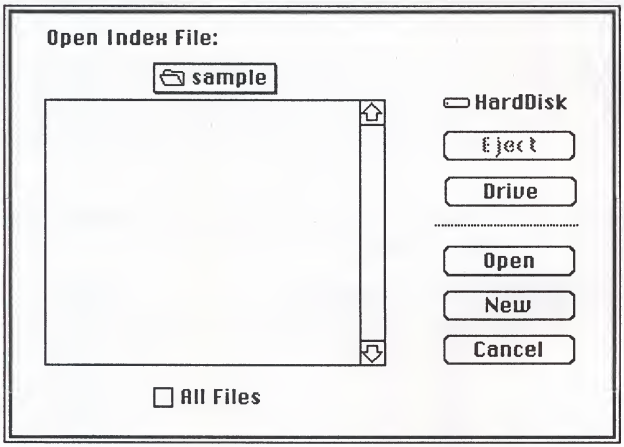


To remove them, press the Delete (or Backspace) key or choose the **Clear** option from the **Edit** menu. The selected fields are removed and the numbering of the remaining fields changes to reflect the new order.

Now let's change how **descript** (2) and **available** (5) will be displayed in the form. Select both fields and remove them. We will replace them using different controls.

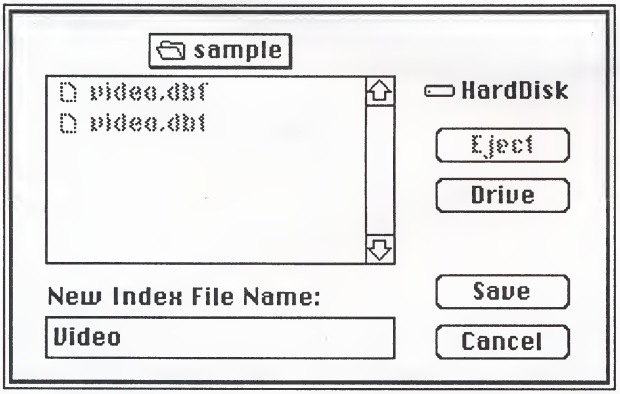
Click on the check box tool, it's the ninth tool down on the left side of the window. Then place the pointer near the lower right corner of the form screen and click. A check box dialog comes forward.





Click **New**. You'll be presented with another directory dialog.

This dialog contains a text box in which you type the new file's name. You'll see a dialog box similar to this every time you create a new file.



Make sure that the **sample** folder is the destination folder, then enter the name **Video** in the text box and press Return or click **Save**. You'll then be presented with an expression builder dialog.

(five if you don't have a color monitor). These options allow you to set the font, size and style of text; specify a fill pattern; change the pen pattern and width; and, if you have a color monitor, adjust the fill and pen color of selected objects.

The Form Menu

The **Form** menu options let you designate certain settings within the current form. Up to ten options will be displayed in this menu that allow you to alter screen attributes, change ruler measurements, adjust grid settings, determine object placement and even create a screen with all fields displayed in a default pattern.

The Edit Menu

The **Edit** menu, which contains the standard editing options, undergoes some changes when a FoxForm window is active. In addition to the regular text editing options (Cut, Copy, Paste and Clear), you'll find a **Duplicate** option that lets you make copies of objects within a Form.

Quick Form

One of the options displayed in the **Form** menu allows you to create a quick form for any database. To create a quick form for **Video.dbf**, choose **Quick Form...** from the **Form** menu.

In the Quick Form dialog, there are two field placement options at the top of the dialog. One displays all the fields from the current database in vertical rows while the other displays them in horizontal rows. Select the box on the right, the one with the vertical rows, by clicking it. Then uncheck the **Titles** check box and click **OK**.

The FoxForm window returns with all 12 fields from the Video database displayed in a dozen numbered field boxes, with the name of each field included in each field box. If you double-click on any these boxes, a field dialog comes forward that displays information concerning the field. All of the fields created by Quick Form are GET fields with no format, no valid clause and no range checking.

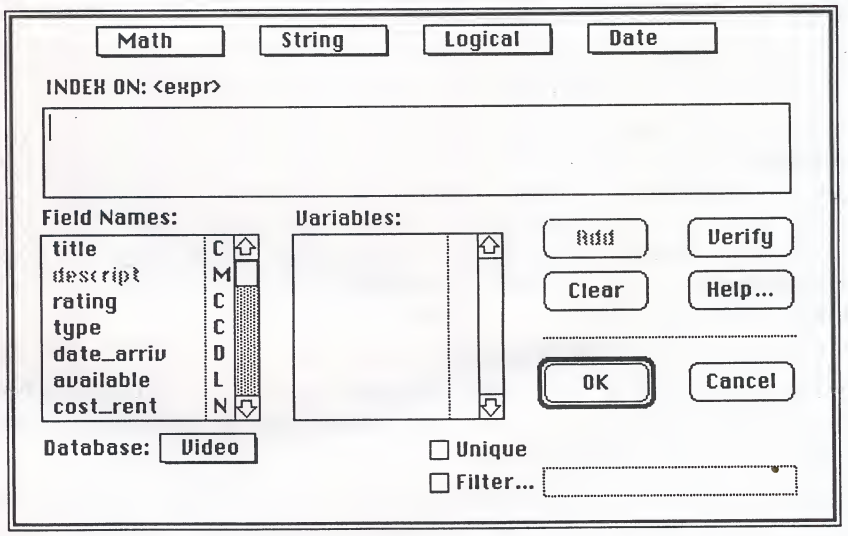
Editing a Form

Of the 12 fields, there are three that you don't need to display and two that you'll want to display in different formats. Let's remove the fields you don't need: **date_arriv** (5), **times_rent** (9) and **num_sold** (10). To remove these fields, start by clicking on **date_arriv**. Then shift-click (hold down the shift key while you click) on **times_rent** and

Expression Builder

The expression builder dialog appears whenever an expression is needed in order to complete a command. An expression can be as simple as a single variable or number, or it can be very complicated and as long as 254 characters.

Creating an index is just one of the many occasions when you'll use the expression builder. You also encounter this dialog, for instance, when you **Sum** an expression, set a relation or specify a **For** or **While** clause.



Expression Builder

The Pull-downs

At the top of the dialog are four pull-down menus: **Math, String, Logical** and **Date**. These are the four types of data you use when building an expression. Clicking and dragging with the mouse when you're positioned on one of these pull-downs displays a menu of functions and operators appropriate to that type of data.

Feel free to take a look at what each menu contains. You'll find an extensive list of useful functions and operators.

11 – FoxForm - Screen Painter

FoxBASE+/Mac contains an integrated collection of applications that can be used separately, or as a team, to create screens, reports, dialogs, even full-blown programs that aid in the entry and management of your data. The applications that make up the team are the screen painter, the template compiler, and the program generator.

The Screen Painter – FoxForm

FoxForm is the FoxBASE+/Mac screen painter and design tool. FoxForm operates in a manner similar to other Macintosh draw and paint programs. It's an object-oriented, "what you see is what you get" form design tool. Fields, labels, boxes, lines, text and other design and control elements can be created and moved around at will. With FoxForm, you can create custom input screens in very little time.

To create a new form:

Choose **New** from the **File** menu, click the **Form** radio button (if it's not already selected) and click **OK**. To open an existing form, choose **Open** from the **File** menu, click the **Form** radio button (if it's not already selected), select the form file you want to open and click **Open**.

Getting Started

Now that you know how to start FoxForm, let's try your hand at Form creation!

Make sure the **Video.dbf** database file is open, then start a new form. A new, untitled FoxForm screen is displayed.

Menu Changes

Whenever the FoxForm window is frontmost, the FoxBASE+/Mac menu bar changes slightly.

The **Text** menu is replaced by the **Object** menu and another menu, **Form**, appears to the left of the **Window** menu. In addition, options in the **Edit** menu are modified.

The Object Menu

The **Object** menu options allow you to set the attributes of selected objects in the FoxForm screen. There are seven options in this menu

The Expression Line and Expression Box

Below the four pull-down menus are the expression line and the expression box. The expression line is there to remind you what you're building an expression for, in this case you're building an index key expression. The expression box, right below the expression line, is where your expression will be displayed *as you build it*.

Creating an Expression

Under **Field Names** you'll see the first seven fields contained in **Video**. To see the remaining fields, you have to use the scroll bar. Memo and picture data type fields are dimmed.

Let's index **Video** on **title**. Double-click on the field name **title** or select **title** and click **Add**; "title" will appear in the expression box.

You could index **Video** on many different expressions. In fact, with the expression builder, there is an almost limitless variety of index expressions you could build. For instance, you could index on **title** and **rating**. Let's see how you'd do that. First, you would select **title** from **Field Names**, which you've already done. Then you'd select "+" from the **String** menu. Do it now. Finally, you'd select **rating** from **Field Names**. The expression box now shows "title + rating". If you were to use this index key expression, **Video** would be indexed on both fields.

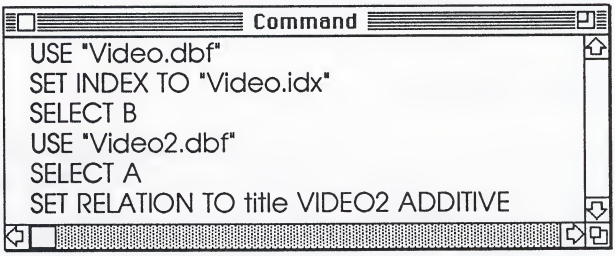
We want to index **Video** on **title**, however, so let's clear the expression box. To clear the expression box, click **Clear**. Now double-click on **title** to move it into the expression box again.

With your index expression now completed, click **Verify**. If all is well with the expression, the message **Expression OK** will appear in the upper-right portion of the Mac's screen. If, however, there are any problems, you will get an error message.

You're now ready to have FoxBASE+/Mac create the new index, so click **OK** in the expression dialog. The new index is created and its name is added to the list of **Indexes** in the **setup** dialog.

10 – The Command Window

The **Command** window is another common way of entering FoxBASE+/Mac commands. Through this window you have access to the full power of FoxBASE+/Mac.



As you were selecting commands from the pull-down menus, you were also generating commands in the **Command** window. FoxBASE+/Mac stores these commands in a history list, from which they can be recalled, edited and re-executed.

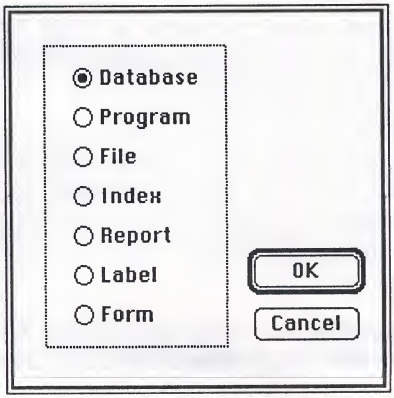
If you're unfamiliar with the FoxBASE+ command language, one way to learn it quickly is to review the commands listed in the **Command** window. They can be recalled just by scrolling.

To edit a command, scroll through the **Command** window until you find the one you want to edit. Use the text editor to add, delete, or change any information in the command. To re-execute, place the insertion point anywhere on the command line and press Return or Enter. Using these techniques, you can quickly and easily execute any of the FoxBASE+/Mac commands. You can even pre-test program ideas and procedures here, then cut and paste them into a program file using the text editor.

7 – Creating a New Database

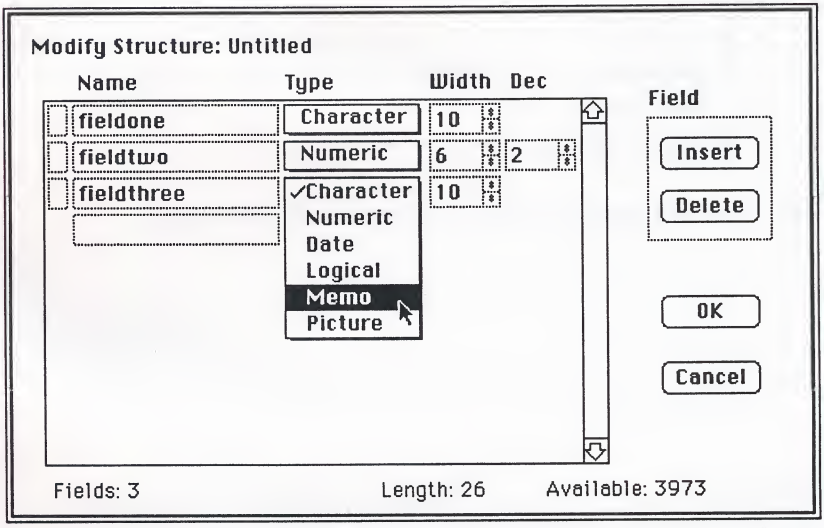
Let's create a new database. Click on work area B. We'll be coming back to work area A shortly. Select **New** from the **File** menu.

You will be presented with the New File dialog.



If the **Database** radio button isn't already selected, select it and click **OK**.

The Modify Structure dialog comes forward.

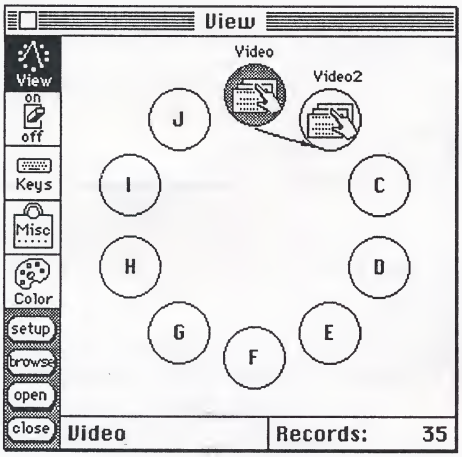


9 – Setting Relations

Now we're going to establish a relation between **Video** and **Video2**. A relation is a link between two or more active databases.

In work area A, open **Video.dbf** and the associated index file **Video.idx.** If you didn't index **Video2** on title as mentioned earlier do it now.

With **Video2** still active in work area B, place the pointer in work area A. Click the mouse button and drag the pointer from **Video** to **Video2**. An arrow appears linking **Video** to **Video2**, and an expression builder dialog comes forward. We want to establish the relation by **title**. So type or move **title** into the expression box, then click **OK**. You've just established a relation from **Video** to **Video2** on title.



View with Relation Set

Now **browse Video**. Move through the records and select one that's midway through the list. Then **browse Video2**. Eureka!! You're positioned on the record that has the same title. The databases are linked.

Modifying or Removing Relations

If you want to examine or modify this relation, just click on the arrow connecting the two work areas. The expression builder comes forward, displaying the current relation between the two work areas. If you want to change the relational expression, simply edit it. If you want to remove the relation, click **Clear**.

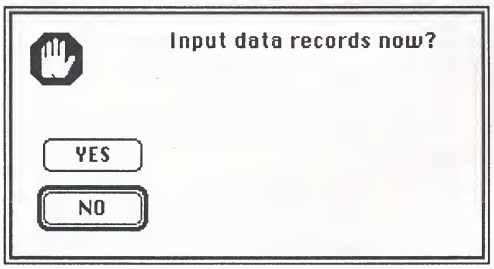
In this dialog, you'll define the fields in your database. For each field that you create, you'll need to:

- Enter a field **Name** (up to 10 characters).
- Select a data **Type** (**Character**, **Numeric**, **Date**, **Logical**, **Memo**, or **Picture**).
- For character data you'll need to enter a field **Width** (up to a maximum of 254).
- For numeric data you'll need to enter a field **Width** (up to a maximum of 16) and, optionally, the number of **Dec**imal positions (no more than the width minus one).

Create a database structure with just two fields: **title** and **our_cost.** Type the name title into the **Name** box. Leave **title** a Character type field, but change the width to 30. In the next **Name** text box that appears, type **our_cost**. Make **our_cost** a Numeric type data field by clicking on the **Type** popup and dragging. Make **our_cost** 6 positions wide with 2 decimal places.

When you're finished, save the structure by clicking **OK**. A directory dialog box comes forward in which you name the new file. Type in **Video2.**

After the new database file is created, FoxBASE+/Mac asks:

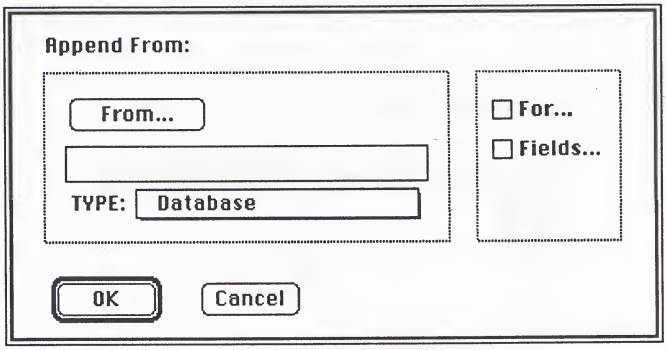


Click **No**. You will return to the interactive command mode.

8 – Importing Data

Now let's insert some data into **Video2** with the help of FoxBASE+/Mac. If you haven't closed **Video** in work area A, do so now by selecting the work area and clicking the **close** button.

Select work area B, the one with **Video2** in it, and choose **Append From** in the **Database** menu. The **Append From** dialog comes forward.



Click on **From...**. If the directory dialog isn't displaying the files in the **sample** folder, open that folder. Select **Video.dbf** and click **From**. When the Append From dialog returns, press Return or click **OK**.

When FoxBASE+/Mac is done **Appending** records, click the **setup** button. Then **browse Video2**. You now have records with data in the **title** field. Feel free to add data to **our_cost** — you'll need to include the decimal point if you enter a dollars and cents value. When you're finished, close the **browse** window.

Before we move on in your tour, index **Video2** on **title**. If you're not sure how, refer back to the section where we indexed **Video** on **title**.